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AMENDMENTS TO THE CLAIMS

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- 1. (Currently Amended) An poxvirus expression vector comprising the nucleic acid sequence as illustrated in SEQ ID NO.: I or an immunoreactive fragment thereof-capable of inducing or enhancing an immune response against the encoded proteins or peptides.
- 2. (Canceled)
- 3. (Canceled)
- 4. (Currently Amended) The expression vector of claim 31 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
- 5. (Original) The expression vector of claim 4 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
- 6. (Previously Presented) The expression vector of claim 1 further comprising at least one additional tumor-associated antigen.
- 7. (Canceled)
- 8. (Canceled)
- 9. (Currently Amended) The expression vector of claim 86 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
- 10. (Original) The expression vector of claim 9 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
- 11. (Original) The expression vector of claim 1 further comprising at least one nucleic sequence encoding an angiogenesis-associated antigen.
- 12. (Canceled)
- 13. (Canceled)
- 14. (Currently Amended) The expression vector of claim 1311 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
- 15. (Original) The expression vector of claim 14 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, Δ LVAC, and Δ LVAC(2).
- 16. (Original) The expression vector of claim 6 further comprising at least one nucleic sequence encoding an angiogenesis-associated antigen.

- 17. (Canceled)
- 18. (Canceled)
- 19. (Currently Amended) The expression vector of claim 1716 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
- 20. (Previously Presented) The poxvirus of claim 19 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
- 21. (Previously Presented) The expression vector of claim 1, 6, 11 and 16 further comprising at least one nucleic acid sequence encoding a co-stimulatory component.
- 22. (Canceled)
- 23. (Canceled)
- 24. (Currently Amended) The expression vector of claim 2321 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
- 25. (Previously Presented) The poxvirus of claim 24 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
- 26. (Currently Amended) A composition comprising an <u>poxyirus</u> expression vector in a pharmaceutically acceptable carrier, said vector comprising the nucleic acid sequence shown in SEQ ID NO.: 1 or an <u>immunoreactive</u> fragment thereof-capable of inducing or enhancing an <u>immune response against the encoded proteins or peptides.</u>
- 27. (Canceled)
- 28. (Canceled)
- 29. (Currently Amended) The expression vector of claim 2826 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
- 30. (Original) The poxvirus of claim 29 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
- 31. (Currently Amended) A method for <u>inducing or enhancing an immune response against a tumor-associated or tumor-specific antigen preventing or treating cancer comprising administering to a host an <u>poxvirus</u> expression vector comprising the nucleic acid sequence illustrated in SEQ ID NO.: <u>125 or 27-</u>or an <u>immunoreactive</u> fragment thereof- <u>capable of inducing or enhancing an immune response against the encoded proteins or peptides.</u></u>

- 32. (Canceled)
- 33. (Canceled)
- 34. (Currently Amended) The expression vector of claim 3331 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
- 35. (Original) The poxvirus of claim 34 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
- 36. (Withdrawn) A peptide derived from BFA4 as shown in Table V, VI or VII.
- 37. (Currently Amended) A method for immunizing inducing or enhancing an immune response in a host against the tumor antigen BFA4 comprising administering to the patient a peptide shown in Table V, VI or VII, either alone or in combination with another agent, where the individual components of the combination are administered simultaneously or separately from one another.
- 38. (Withdrawn) A peptide derived from BCY1 as shown in Table VIII or IX.
- 39. (Withdrawn) A method for immunizing a host against the tumor antigen BCY1 comprising administering to the patient a peptide shown in Table VIII or IX, either alone or in combination with at least one other agent, where the individual components of the combination are administered simultaneously or separately from one another.
- 40. (Previously Presented) The expression vector of claim 6 wherein the at least one additional tumor-associated antigen has the amino acid sequence of SEQ ID NO:4.
- 41. (Previously Presented) The expression vector of claim 11 further comprising at least one additional nucleic acid sequence encoding a tumor-associated antigen having the amino acid sequence of SEQ ID NO:4.
- 42. (Previously Presented) The expression vector of claim 16 wherein the at least one additional tumor-associated antigen has the amino acid sequence of SEQ ID NO:4.
- 43. (Previously Presented) The expression vector of claim 21 wherein the at least one additional tumor-associated antigen has the amino acid sequence of SEQ ID NO:4.
- 44. (Currently Amended) An poxvirus expression vector comprising a nucleic acid sequence encoding a polypeptide having the amino acid sequence of SEQ ID NO:27, the expression vector capable of inducing or enhancing an immune response against the encoded polypeptide.
- 45. (Canceled)
- 46. (Canceled)

47. (Currently Amended) The expression vector of claim 4644 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.

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- 48. (Previously Presented) The expression vector of claim 47 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
- 49. (Previously Presented) The expression vector of claim 44 further comprising a nucleic acid encoding at least one additional tumor-associated antigen.
- 50. (Canceled)
- 51. (Canceled)
- 52. (Currently Amended) The expression vector of claim <u>5149</u> wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
- 53. (Previously Presented) The expression vector of claim 52 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
- 54. (Previously Presented) The expression vector of claim 44 further comprising at least one nucleic sequence encoding an angiogenesis-associated antigen.
- 55. (Canceled)
- 56. (Canceled)
- 57. (Currently Amended) The expression vector of claim <u>5654</u> wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
- 58. (Previously Presented) The expression vector of claim 57 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
- 59. (Previously Presented) The expression vector selected from the group consisting of the expression vector of claims 44, 49 and 54 further comprising at least one nucleic acid sequence encoding a co-stimulatory component.
- 60. (Canceled)
- 61. (Canceled)
- 62. (Currently Amended) The expression vector of claim 6159 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.

- 63. (Previously Presented) The poxvirus of claim 62 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
- 64. (Previously Presented) A pharmaccutical composition comprising an expression vector of claim 44.
- 65. (Previously Presented) A pharmaceutical composition comprising an expression vector of claim 49.
- 66. (Previously Presented) A pharmaceutical composition comprising an expression vector of claim 54.